What is claimed is:

1. A display unit comprising:

a plurality of electron emission devices arranged in a matrix format;

a plurality of scan lines arranged in a row direction and connected to the plurality of electron emission devices;

a plurality of data lines arranged in a column direction and connected to the plurality of electron emission devices;

a scan driver for supplying a selection signal for selecting a line of electron emission devices to the scan lines sequentially in the column direction;

a data driver for supplying to each of the plurality of data lines a video-signal-based drive signal for driving the electron emission devices; and

a signal corrector circuit for correcting the drive signals to be supplied to the plurality of data lines in accordance with the video signal.

2. The display unit according to claim 1 wherein the signal correction circuit provides corrections which vary with the position of the plurality of electron emission devices in the row direction.

3. The display unit according to claim 1 wherein an electrical current flows to each electron emission device in accordance with the potential difference between a selection signal and drive signal supplied to a plurality of electron emission devices in the selected line, and the correction values are determined so as to compensate for a voltage decrease in the row direction of each of the plurality of electron emission devices that is determined by the value of the current and the wiring resistance of the scan lines at various positions of a plurality of electron emission devices arranged in the row direction.

4. A display unit comprising:

a display panel including scan lines to which a selection signal is supplied for selecting a line of a plurality of electron emission devices arranged in a matrix format and data lines to which a video-signal-based drive signal is supplied for driving the plurality of electron emission devices; and

a signal corrector circuit,

wherein a current according to a potential difference between the selection signal and the drive signal flows to a plurality of electron emission devices in the selected

line via scan lines connected to a plurality of electron emission devices in the selected line so that the electron emission devices emit electrons in accordance with the current; and

wherein the signal corrector circuit corrects each of the drive signals to be supplied to a plurality of electron emission devices in the selected line in accordance with the video signal in order to compensate for a voltage decrease that arises when the current flows to scan lines connected to a plurality of electron emission devices in the selected line.

5. A display unit comprising:

a plurality of scan lines extending in a row direction;

a plurality of data lines extending in a column direction;

an electron emission device positioned at intersections of the plurality of scan lines and the plurality of data lines;

a scan driver for supplying a selection signal to select a line of the electron emission device to the plurality of scan lines sequentially in the column direction;

a data driver for supplying to each of the plurality of data lines a video-signal-based drive signal for driving the electron emission devices; and

a signal corrector circuit for individually correcting the drive signals to be supplied respectively to the plurality of electron emission devices,

wherein the signal corrector circuit corrects each of the drive signals by adding to the video signal correction values appropriate for a plurality of electron emission devices arranged in the row direction, so that each of the correction values varies with the magnitude of the video signal.

6. The display unit according to claim 5 wherein the scan driver is connected to one end of the scan lines so that the correction values increase with an increase in the distance between electron emission devices connected to the scan lines and the scan driver while the video signal remains constant.

7. The display unit according to claim 5 wherein the correction values are determined in accordance with the magnitude of voltage decrease at each position of a plurality of electron emission devices connected to the scan lines.

8. A display unit, comprising:

a display panel in which m × n electron emission devices are arranged in a matrix format and positioned at the intersections of m scan lines and n data lines, and phosphors are positioned opposite the electron emission devices;

a data driver for sequentially supplying a column of video-signal-based drive signal to the n data lines;

a scan driver for adding a selection signal for selecting a line of the electron emission devices to the m scan lines sequentially in the column direction; and

a signal corrector circuit for compensating for a voltage increase caused by the value Ii (i = 1 to n) of a current, which flows from each of n column wiring lines to the scan wiring for the selected line, when the scan driver selects a line.

9. The display unit according to claim 8 wherein the signal corrector circuit corrects the video data to be supplied to the data driver, and uses the value Di + Ci as the video signal when the video signal correction amount Ci is determined from Equation 1 below where columns are sequentially designated 1, 2, 3, and so on to n beginning with the one closest to the scan driver, the video signal amplitude of the i-th column is Di, and a predetermined coefficient is k:

$$C_i = C_{i-1} + \sum_{j=1}^{n} k \cdot D_j$$

where i, j $\geq$ 1, c0 = 0, k = coefficient, and n = data line count.

10. The display unit according to claim 8 wherein the signal corrector circuit corrects the video data to be supplied to a data drive circuit for driving the video signal, and uses the value Di + Ci as the video signal when the video signal correction amount Ci is determined from Equation 2 below where columns are sequentially designated 1, 2, 3, and so on to n beginning with the initial column for an incoming dot-sequential video signal, the scan drive circuit is positioned toward column n, the video signal amplitude of the i-th column is Di, and a predetermined coefficient is k:

$$C_i = \sum_{j=1}^{i} k \cdot D_j$$

where k is a coefficient.

11. The display unit according to claim 8 wherein the signal corrector circuit corrects the video data to be supplied to a data drive circuit for driving the video signal, positions the scan driver toward column n, and provides cumulative additive correction by multiplying the video signal amplitude Di of the i-th column by a predetermined coefficient.

12. A display unit, comprising:

a display panel in which a plurality of scan lines extend in a row direction, a plurality of data lines extend in a column direction, and a plurality of electron emission devices are mounted at intersections of the plurality of scan lines and the plurality of data lines;

a scan driver for supplying a selection signal for selecting a line of the plurality of electron emission devices to the plurality of scan lines sequentially in the column direction;

a data driver for supplying a video-signal-based drive signal for driving the electron emission devices to each of the plurality of data lines;

an input section for entering the video signal and a video signal processor circuit for processing the video signal entered from the input section;

an interface section for transmitting/receiving the video signal output from the video signal processor circuit in digital form; and

a signal corrector circuit for correcting a digital video signal received by the interface section and supplying the corrected signal to the data driver,

wherein the signal corrector circuit corrects the drive signals to be supplied to a plurality of electron emission devices by adding correction values appropriate for the plurality of electron emission devices arranged in the row direction after calculating the correction values in accordance with the digital video signal.

13. The display unit according to claim 12 wherein the display panel, the scan driver, and the data driver constitute a display module; wherein a receiver of the interface section is positioned toward the display module; and wherein a transmitter of the interface section transmits a video signal from the video processor circuit to the receiver in digital form.

14. A display unit comprising:

a display panel in which a plurality of scan lines extending in the row direction are arranged in the column direction, a plurality of data lines extending in the column direction are arranged in the row direction, and a plurality of electron emission devices are mounted respectively at intersections of the plurality of scan lines and the plurality of data lines;

a scan driver that is connected to the plurality of scan lines to supply a selection signal for selecting a line of the plurality of electron emission devices to the plurality of scan lines sequentially in the column direction; and

a data driver for supplying a video-signal-based drive signal for driving the electron emission devices to each of the plurality of scan lines,

wherein, if a white window pattern is displayed in a predetermined area within a totally black area, the level of the drive signal for a plurality of electron emission devices corresponding to the black area becomes constant, and the drive signal for a plurality of electron emission devices corresponding to the area of the white window pattern is corrected so that the drive signal increases gradually or stepwise as the distance to the scan driver increases in the row direction.